

distinction; and the new species cannot be the *Astræa* (*Heli-astræa*) *Prevostana*, Ed. & Haime*, which only differs from *A. Raulini* by its closer calices, thicker walls, and less developed costæ. The columella is well developed in this last species, if it be like *A. Raulini*. MM. Milne-Edwards and J. Haime do not figure or positively describe their "unique échantillon" "en assez mauvais état."

Locality, Bed No. 1 (Adams), Malta. Coll. Geol. Soc.

EXPLANATION OF PLATE XI.

- Fig. 1.* *a*, corallite of *Cænocyathus Adamsi*; *b*, its calice, magnified 2 diameters.
Fig. 2. *a*, corallum of *Heliastrea Forbesi*, natural size; *b*, usual appearance of badly preserved specimens; *c*, calices, natural size; *d*, calices, magnified 4 diameters; *e*, monstrous calice with seven systems, magnified 4 diameters; *f*, calice without a columella, magnified 4 diameters.

XXXI.—Description of a new Genus of Amphipod Crustacea.

By Dr. FRITZ MÜLLER.

[Plate X.]

BATEA, nov. gen.

Antennæ simple. Coxæ of the first pair of gnathopoda rudimentary, those of the second pair of gnathopoda and the first two pairs of pereopoda largely developed. Coxæ of the second pair of pereopoda deeply excavated upon the upper part of the posterior margin. First pair of gnathopoda rudimentary, consisting of coxa and basis only; second pair of gnathopoda subchelate. Mandibles having an articulated appendage. Maxillipeds having a squamiform plate on both the basis and ischium joints. Fourth and fifth pairs of pleopoda with styli-form rami, sixth pair with subfoliaceous rami. Telson single, deeply cleft.

Species *Batea catharinensis*, F. M.

I will here add some remarks on the sexual differences of this interesting species. The pereion is somewhat longer and higher in the female; the antennæ of the same are shorter. The first joint of the peduncle of the upper antennæ has three, the second four, fasciculi of hairs on the inferior side in the male; they are wanting in the female. The long setæ at the extremity of the alternate articles of the flagellum of the first antennæ are directed downwards in the female, backwards in the male. The third and fourth joints of the peduncle of the lower antennæ have fasciculi

* *Op. cit.* vol. ii. p. 475.

of short hairs on their upper sides in the male, which are wanting in the female. (The eyes are larger in the male.) The flagellum of the lower antennæ has long upward-directed setæ at the extremities of alternate joints in the female, which do not exist in the male. The first pair of gnathopoda are shorter in the male, with but few hairs near the top; they are as long as the basis of the second pair of gnathopoda in the female, slender, flexible, with long hairs on the anterior margin, and shorter curved hairs at the distal extremity. The coxæ of the second pair of gnathopoda are much higher in the female. The first two pairs of pereopoda have the carpus and propodus fringed with long hairs at the posterior margin; these hairs are wanting in the female.

Desterro, Brazil, Oct. 10, 1864.

EXPLANATION OF PLATE X.

Fig. 1. *Batea catharinensis*, male: *b*, superior antennæ; *g*, maxilliped; *h*, first gnathopod; *h*¹, coxa; *h*², basis; *i*, second gnathopod; *q*, second pleopod; *r*, third ditto; *s*, fourth ditto; *t*, fifth ditto; *v*, posterior pleopod; *z*, telson.

XXXII.—On the Fresh- and Salt-water Rhizopoda of England and India. By H. J. CARTER, F.R.S. &c.

[Continued from vol. xiii. p. 36.]

[Plate XII.]

IN my last communication on the Rhizopoda of England and India, I ended with the mention of the new genus and species *Acanthocystis turfacea* (Annals, vol. xii. p. 263), the magnified view of the spine of which (vol. xiii. pl. 2. fig. 25 *i*) should not be tapering in the shaft, as therein represented, but of the same size throughout as at the bifid extremity. (See those round the entire figure.) Will the reader be pleased to make the correction?

Just preceding the mention of *Acanthocystis* allusion is made to *Actinophrys oculata* as having been in company with *A. Eichhornii* in "fresh water." This is also a mistake; for I find by my notes that this species was found in another basin, and one which contained salt water. Further, I intimated my intention to write more on *A. oculata* hereafter; so we will now return to it.

Actinophrys oculata, Stein. (Die Infus. tab. v. & Pritchard's Hist. of Infus. pl. 23.) Pl. XII. figs. 1, 2, 3.

I have only seen specimens of this species once, viz. in July